

Assigned DOGM File No.: S/053/0080  
DOGM Lead: LK  
Permit Fee \$ 150 Ck # 823

Task ID # 3445

**STATE OF UTAH**  
**DEPARTMENT OF NATURAL RESOURCES**  
**DIVISION OF OIL, GAS AND MINING**  
1594 West North Temple Suite 1210  
Box 145801  
Salt Lake City, Utah 84114-5801  
Telephone: (801) 538-5291 Fax: (801) 359-3940

**NOTICE OF INTENTION TO COMMENCE SMALL MINING OPERATIONS**

The informational requirements of this form are based on provisions of the Mined Land Reclamation Act, Title 40-8, Utah Code Annotated 1987, and the General Rules as promulgated under the Utah Minerals Regulatory Program.

Note on confidentiality: Information provided in the notice of intention relating to the location, size, or nature of the mineral deposit that is clearly marked confidential will be protected as confidential. Each page or map requested to be kept confidential must be stamped or marked as such. The requested confidential information must describe how the confidential material relates to the location size or nature of the mineral deposit; provide a written claim of business confidentiality; and/or include a concise statement of reasons supporting the claim of business confidentiality, unless disclosing the location of explosives or historic, prehistoric, paleontological, or biological resource that must be considered confidential under statute.

"Small Mining Operations" mining operations which have a disturbed area of five or less surface acres at any time.

\*\*\*\*\*

**I. GENERAL INFORMATION** (Rule R647-3-104)

- Name of Mine: GEM MINE
- Legal name of entity (or individual) for whom the permit is being requested:  
Good Earth Minerals, LLC  
Mailing Address: 600 17<sup>th</sup> Street, Suite 2800 South  
City, State, Zip: Denver, Colorado 80202-5428  
Phone: 303-804-0100  
Fax:  
E-mail Address:  
Type of Business: Corporation ( ) LLC  Sole Proprietorship (dba) ( )  
Partnership ( ) General or limited  
**Or:**  
Individual ( )

**Entity must be registered (and maintain registration) with the State of Utah, Division of Corporations (DOC) [www.commerce.utah.gov](http://www.commerce.utah.gov).**

Are you currently registered to do business in the State of Utah? Yes

**Entity # 7588055-0161**

If no, contact [www.commerce.utah.gov](http://www.commerce.utah.gov) to renew or apply.

Local Business License # (if required) NA Issued by: County or City

**RECEIVED**

**MAR 15 2010**

**Div. of Oil, Gas & Mining**

**3. Contact Person(s)**

Name: Dr. Janice Jones Title: Manager  
Address: 600 17<sup>th</sup> Street, Suite 2800 South  
City, State, Zip: Denver, Colorado 80202  
Phone: 303-804-0100 Fax: 720-283-1857  
Emergency, Weekend, or Holiday Phone: 303-521-3964  
E-mail Address: jjones39@gmail.com

**Contact person to be notified for: permitting (x) surety (x) Notices (x) (please check all that apply)**

Name: Dr. Janice Jones Title: Manager  
Address: 600 17<sup>th</sup> Street, Suite 2800 South  
City, State, Zip: Denver, Colorado 80202  
Phone: 303-804-0100 Fax: 720-283-1857  
Emergency, Weekend, or Holiday Phone: 303-521-3964  
E-mail Address: jjones39@gmail.com

**Contact person to be notified for: permitting ( ) surety ( ) Notices ( ) (please check all that apply)**

Registered Utah Agent (as identified with the Utah Department of Commerce) (if individual leave blank):

Name: Mr. George Ventura (Attorney)  
Address: 170 S. Main Street., # 1500  
City, State, Zip: Salt Lake City, Utah 84101  
Phone: 801-534-7477 Fax: 801-328-0537  
E-mail Address: Gventura@joneswaldo.com

**4. If Business is a Sole Proprietor:**

Name of Owner: \_\_\_\_\_ Title: \_\_\_\_\_  
Business Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
E-mail Address: \_\_\_\_\_

**If Business is a Corporation:**

Name of Officers: \_\_\_\_\_ Title: \_\_\_\_\_  
\_\_\_\_\_ Title: \_\_\_\_\_  
\_\_\_\_\_ Title: \_\_\_\_\_  
\_\_\_\_\_ Title: \_\_\_\_\_

Headquarters Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Headquarters Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
E-mail Address: \_\_\_\_\_

**If Business is a Limited Liability Company: Member Managed G Manager Managed G**

Name of 1<sup>st</sup> Member/Manager: Janice Jones Title: Manager  
Business Address: 600 17<sup>th</sup> St. Suite 2800 South  
City, State, Zip: Denver, Colorado 80202  
Phone: 303-804-0100 Fax: 720-283-1857  
E-mail Address: jjones39@gmail.com

Name of 2<sup>nd</sup> Member/Manager: New Horizons Capital, LLC Business  
Address: 9249 S. Broadway Blvd. Unit 200-363  
City, State, Zip: Highlands Ranch, Colorado 80129  
Phone: Fax: 303-521-3954  
E-mail Address: jjgrace39@gmail.com

**If Business is a Partnership:**

Name of Partner: \_\_\_\_\_  
Business Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
E-mail Address: \_\_\_\_\_

**5. Ownership of Land Surface:**

Private (Fee) G **Public Domain (BLM) G** National Forest (USFS) G  
State Trust Land/School Sections G State Sovereign Lands G  
Other (please describe): \_\_\_\_\_  
Name: **U. S. Bureau of Land Management**  
Address: **Utah State Office**  
**P.O. Box 45155**  
**Salt Lake City, Utah 84145-0155**

**6. Ownership of Minerals:**

Private (Fee) G **Public Domain (BLM) G** National Forest (USFS) G  
State Trust Land/School Sections G State Sovereign Lands G  
Other (please describe): **Good Earth Minerals, LLC Mining Claims**  
Name: **Good Earth Minerals, LLC**  
Address: **600 17<sup>th</sup> Street, Suite 2800 South**  
**Denver, Colorado 80202**

BLM Lease or Project File Number(s) and/or USFS assigned Project Number(s):

**BLM Claim Numbers : UMC 367313 AND UMC 367314**

**7. Have the above surface and mineral owners been notified in writing?**

**Yes**

If no, why not? NA

Please be advised that if State Trust Lands are involved, notification to the Division of Oil, Gas and Mining alone does not satisfy the notification requirements of Mineral Leases upon State Trust Lands. Exploration or mining activity on State Trust Lands requires a minimum of 60 days notice to the Trust Lands Administration prior to commencing any activities. Please contact the School Institutional Trust Lands Administration (SITLA) at (801) 538-5508 for notification requirements.

8. Does the Entity have legal right to enter and conduct mining operations on the land covered by this notice? **Yes**

## II. PROJECT LOCATION & MAP (Rule R647-3-105)

### 1. Project Location & Maps (legal description):

County(ies): Washington

NW1/4, of NE1/4, of NW1/4: Section: 24 Township: 43 South Range: 17 West  
SW1/4, of NE1/4, of NW1/4: Section: 24 Township: 43 South Range: 17 West

**UTM East 259,018 M : UTM North 4,102,328,940 M : UTM Zone 12 NAD 83**

Name of Quad Map for Location: **White Hills 7 ½ Minute Quadrangle**

2. **Location and Operations maps** must be plotted at a scale to accurately identify locational landmarks and operations details. All maps must include a north arrow, scale, appropriate labels, and title box including the mine name, township, range and section. **Please see Attached Maps 1 through 5.**
- The general location map must be the scale of a USGS 7.5 minute series map or equivalent (1"=2000') and identify new or existing access roads. **Maps 1 - 6.**
  - The operations map (1"=200' or other scale as determined necessary by the Division) must be labeled and identify: **(Please See Maps 2 through 7) Detail is on Map 5 and Cross-Sections A through G. (Total = 7 Maps and 7 Cross-Sections).**
    - The area to be disturbed;
    - The location of any existing or proposed operations including access roads, drill holes, trenches, pits, shafts, cuts, or other planned activities; and
    - Any adjacent previous disturbance for which the operator is not responsible.(Contact the Division for a list of consultants and land surveyors for mapping assistance.)
3. The proposed (5 acre or less) disturbed area (including access/haul roads) should be marked in the field ON THE GROUND with metal T-Posts (or with some other marker of equal effectiveness). Markers should be appropriately spaced so that the next marker in either direction is clearly visible with the naked eye.

## III. OPERATION PLAN (Rule R647-3-106)

- Type of mining: **Surface**
- Mineral(s) to be mined: **Gypsum will be mined to produce high purity gypsum for the Plastics Filler Market where Gypsum is substituted for petroleum based fillers and fire retardant use.**
- Amount of material to be extracted, moved, or proposed to be moved: **Approximately 250,000 to 300,000 tons of gypsum is proposed for extraction and removal from the 5-acre area (See Cross-Sections).**
- Will any water, liquid chemicals, reagents, or other solutions be used, produced or discharged as part of the mining or milling process? If yes, please describe (add extra pages if needed): **Yes, water will be used for dust control only on the roads and at the site. The drill and blast and dozer operation with subsequent crushing to size for hauling will not use water. Milling and further beneficiation of the gypsum ore will be done off-site.**
- Provide a brief description of the proposed mining operation and onsite processing facilities (add extra pages if necessary). **See attached description.**
- NO** New Road(s): Length (ft) Width (ft) **There will be no new roads made with this plan.**

7. **YES** Improved Road(s): Provide a description of the improvements that need to be made to existing roads to access the site, including the Length (ft) and Width (ft) of new disturbances. **Off-road/on-road haul trucks will use County RS 2477 access roads Blake Lambing Road (RD270182), the Bloomington Mine Valley Road (RD270178), and the Mine Valley Road to the West Apex Road for access to the west and north to Utah Highway 93. Grading (blading) of haulage portions of roads will be coordinated with Washington County and the roads will stay within their existing widths. The Mine Valley Road is periodically maintained by the County at +20 ft. wide, and it will not require any modification except periodic maintenance in inclement weather. A portion of RD270178 was modified by drill blast in 2009 by a fiber optics cable company. The portion noted on the maps may require some compacting and minor fill material to smooth shot rock surfaces in the road width. See area on Maps 2-5.**
8. Total project surface acreage to be disturbed: (acres) PLEASE SPECIFY EXACT ACREAGE - (this will be used to determine surety bond amount – see #VI). The mine is proposed to disturb **4.996 Acres.**
9. Proposed startup date (month, year) **September 2010**
10. Proposed completion date, if known (month, year). **This date is not presently known as market demands and product sales will determine rate of mining and use of the 250,000 tons. Start up will mine about 20,000 tons per year and ramp up. This puts a possible end time at approximately 10 years.**

**IV. OPERATION AND RECLAMATION PRACTICES** (Rule R647-3-107, 108 & 109)

The reclamation and operation obligation is to keep the area clean and safe, minimize hazards to public safety, return the land to a useful condition, and reestablish at least 70 percent of the premining vegetative ground cover or within practical limits. To accomplish this, the Permittee / Operator will need to perform reclamation concurrently, or at the completion (within one (1) year) of mining. Please refer to The Practical Guide to Reclamation in Utah, available at [https://fs.ogm.utah.gov/pub/MINES/Coal\\_Related/RecMan/Reclamation\\_Manual.pdf](https://fs.ogm.utah.gov/pub/MINES/Coal_Related/RecMan/Reclamation_Manual.pdf).

1. Keep the mining operation in a safe, clean, and environmentally stable condition.
2. Permanently seal all shafts and tunnels to prevent unauthorized or accidental entry.
3. Plug drill holes with a five foot cement surface plug. Holes that encounter fluids are to be plugged in the subsurface to prevent aquifer contamination.
4. Construct berms, fences, or barriers, when needed, above highwalls and excavations.
5. Remove, isolate, or neutralize all toxic materials in a manner compatible with federal and state regulations.
6. Remove all waste or debris from stream channels.
7. Dispose of any trash, scrap metal, wood, machinery, and buildings.
8. Conduct mining activities so as to minimize erosion and control sediment.
9. Reclaim all roads that are not part of a permanent transportation system.
10. Stockpile topsoil and suitable overburden prior to mining.
11. Stabilize highwalls by backfilling or rounding to 45 degrees or less, where feasible; reshape the land to near its original contour, and redistribute the topsoil and suitable overburden.

12. Properly prepare seedbed to a depth of six inches by pocking, ripping, discing, or harrowing. Leave the surface rough.
13. Reseed disturbed areas with adaptable species. (The Division recommends a mixture of species of grass, forb, and browse seed, and will provide a specific species list if requested.)
14. Plant the seed with a rangeland or farm drill, or broadcast the seed. Fall is the preferred time to seed.

**V. VARIANCE REQUEST (Rule R647-3-110)**

**Any variance request must be approved in writing by the Division**

Any planned deviations from Rules R647-3-107, Operation Practices, R647-3-108, Hole Plugging Requirements, or R647-3-109, Reclamation Practices, as summarized above (see I/Operation and Reclamation Practices Item # 1-14), should be identified below listing applicable rule number. Give justification for the variance(s) and alternate methods or measure to be utilized. Written approval from the Division will be given, if the proposed alternative methods to be used are consistent with the Act.

Are variances being requested? **NO REQUEST**

1<sup>st</sup> Variance Requested

Item #    Applicable Rule # (i.e. R647-3-109.10 (if you did not want trenches & pits reclaimed)

Justification:

Alternate methods or measure to be utilized:

2<sup>nd</sup> Variance Requested

Item #    Applicable Rule #

Justification:

Alternate methods or measure to be utilized:

3<sup>rd</sup> Variance Requested

Item #    Applicable Rule #

Justification:

Alternate methods or measure to be utilized:

Attach additional page if more variances are requested.

**VI. SURETY** (Utah Code Ann. §0-8-7(1)(c))

**A reclamation contract and surety must be provided to and approved by the Division prior to commencement of operations. No surface disturbance is authorized until the surety is posted and approved in writing.** The surety may be provided in the form of a certificate of deposit, a letter of credit, a surety bond, or cash. Please contact the Division for further information about submitting the surety. All mining operations are required to furnish and maintain reclamation surety to guarantee that the land affected is reclaimed (Utah Code Ann. §0-8-7(1)(c)).

The reclamation surety amount is based on the nature, extent and duration of operations. The amounts are based on data from current large mine surety and are used as a general guide, along with actual site conditions. Reclamation surety for small mines is reviewed every three (3) or five (5) years and adjusted as necessary for inflation/deflation based upon acceptable Costs Index. **Contact the Division for the dollar amount required for a three (3) or five (5) year period for this project.**

**VII. PERMIT FEE** (Utah Code Ann. §0-8-7(1)(i))

A permittees authorization under a notice of intention to conduct small mining operations shall require the paying of permit fees as authorized by the Utah Legislature (R647-3-102.5). Permit fees are assessed to new and existing small mining operations, and annually thereafter, until the

project disturbances are successfully reclaimed by the Permittee / Operator and released by the Division.

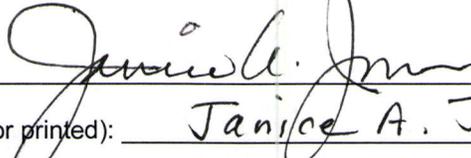
**Small Mine Notices require a \$150.00 fee, which must accompany this application, or the Division cannot process it.**

**VIII. SIGNATURE REQUIREMENT**

**CERTIFICATION**

I state under penalty of perjury under the laws of the state of Utah and the United States of America that:

- a. I have read this form and declare the information, statements and/or documentation are true, correct and complete to the best of my knowledge and belief; AND
- b. I commit to the reclamation of the aforementioned small mining project as required by the Utah Mined Land Reclamation Act (40-8) and the rules as specified by the Board of Oil, Gas and Mining.
- c. **This certification must be signed by:** (1.) an executive officer if the applicant is a corporation; (2.) a partner if applicant is a partnership (general or limited); (3.) the owner if applicant is a sole proprietorship; or (4.) the member or manager if applicant is a limited liability company.

Signature:  Date: 3/6/10  
Name (typed or printed): Janice A. Jones  
Title/Position (if applicable): Manager

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**GEM Mine Plan of Operation**

**Description Pages for Item # III. 5.**

**MINE PLAN OF OPERATIONS FOR U.S. BUREAU OF LAND  
MANAGEMENT AND UTAH DIVISION OF OIL, GAS, AND MINING  
FOR OPERATIONS TO CREATE A 5-ACRE MINE ON THE NE ¼ OF  
THE NW1/4 OF SECTION 24, T43S, R17W, SLBM**

**FROM GOOD EARTH MINERALS, LLC**

Good Earth Minerals, LLC proposes to mine the 4.99-Acre area noted on the attached mine maps and cross-sections (detail on Map#7) using convention drill blast techniques with subsequent sizing by crushing and screening. Off-road/on-road haul trucks will transport the ore to an off-site milling operation via existing County roads.

Gypsum will be mined and later milled to produce plastic fillers and fire retardants that require high purity gypsum. Gypsum located on the property is layered in the Harrisburg member of the upper Kaibab formation. In Section 24, this formation contains several thick layers of very high grade gypsum (pure 90–95+% gypsum) that ranges from 15- to 35-feet thick. Registered geologist Jack Bright mapped and extensively sampled the area, including the 5-acre proposed mining area, for Behre Dolbear Mineral Consultants in 2000. His 110 samples taken from hand channels were analyzed by Act-Labs-Skyline Laboratories, and were found to contain very high-grade average gypsum analyses.

**PROPOSED SURFACE MINING OPERATION:**

The details of the area proposed for mining are referenced on Map 7 and the Mine and Reclamation Cross-Sections A-A' through G-G'.

Initially, access directly into the staging area and into the proposed mining area will be made from the adjacent Blake Lambing Road (RD270182). Access to the top and to the east of an old bulldozer channel cut will be made through the low saddle noted on Map 7. Subsequent access will be made to the top of the southern saddle for mining.

Initial clearing of the mining areas will save topsoil for reclamation of the area. The topsoil storage area is noted on Map 7. Concurrent reclamation with fill and topsoil placement is proposed to follow mining.

Mining with dozer and drill-blast methods will progress from the top down to allow separation of high-grade gypsum beds. The thin separable interbeds of limestone and silt, and the limestone cap material will be used as fill where needed to attain reclamation slopes.

Waste retained on the site will be under 5% of mined material. This mixed rock and soil from mining will be distributed on sloped benches during reclamation, after scarification and prior to saved topsoil placement.

## **GEM Mine Plan of Operation**

Mining will be down to the reclamation profiles and contours seen on Cross-Sections A-A' through G-G'.

Mined gypsum will be transported to the staging area for crushing and sizing prior to loading on off-road/on-road haul trucks for transportation to Utah Highway 93. Mined gypsum rock will be primarily crushed and screened in the 5-acre area at the staging area (see Map 7) and then loaded into haul trucks and taken off-site for milling.

The mining operation will use one (1) water truck for dust control on access roads and on mine site. Mining operations will also require one (1) small motor-grader for clearing overburden in flat areas and for road maintenance, contracted 20-25 ton haul trucks to transport ore, one (1) Air-Track Drill, one (1) 980 to 988 Cat type loader, one (1) Cat Type 235 Trackhoe, one (1) D-9 Cat type bulldozer for limestone cap removal, and one (1) or two (2) pickup trucks for personnel transportation. A primary jaw and/or cone crushing spread will be set up in the noted staging area to allow primary sorting of material before trucking.

Primary crushing and screening to 3/8" to 2" size will be done on-site in the staging area using portable/movable crushing and screening equipment. Further processing to reach customer specifications will be done off-site.

Good Earth Minerals, LLC will employ the services of a licensed blasting contractor who will comply with all applicable regulations and standards established by the regulating agencies, codes, and professional societies including the rules and regulations for storage, transportation, delivery, and use of explosives. No explosives will be stored on-site.

See Attached Maps and Sections:

Map 1 - Regional Index Map (1:100,000)

Map 2 - JBR Aerial Photo Haulage Access Map 2 for 5-Acre Mine Plan (1 Inch = 3 Miles)

Map 3 - General Location Map of GEM Mine (1:24,000)

Map 4 - General Location Aerial Photo of GEM Mine (1:24,000)

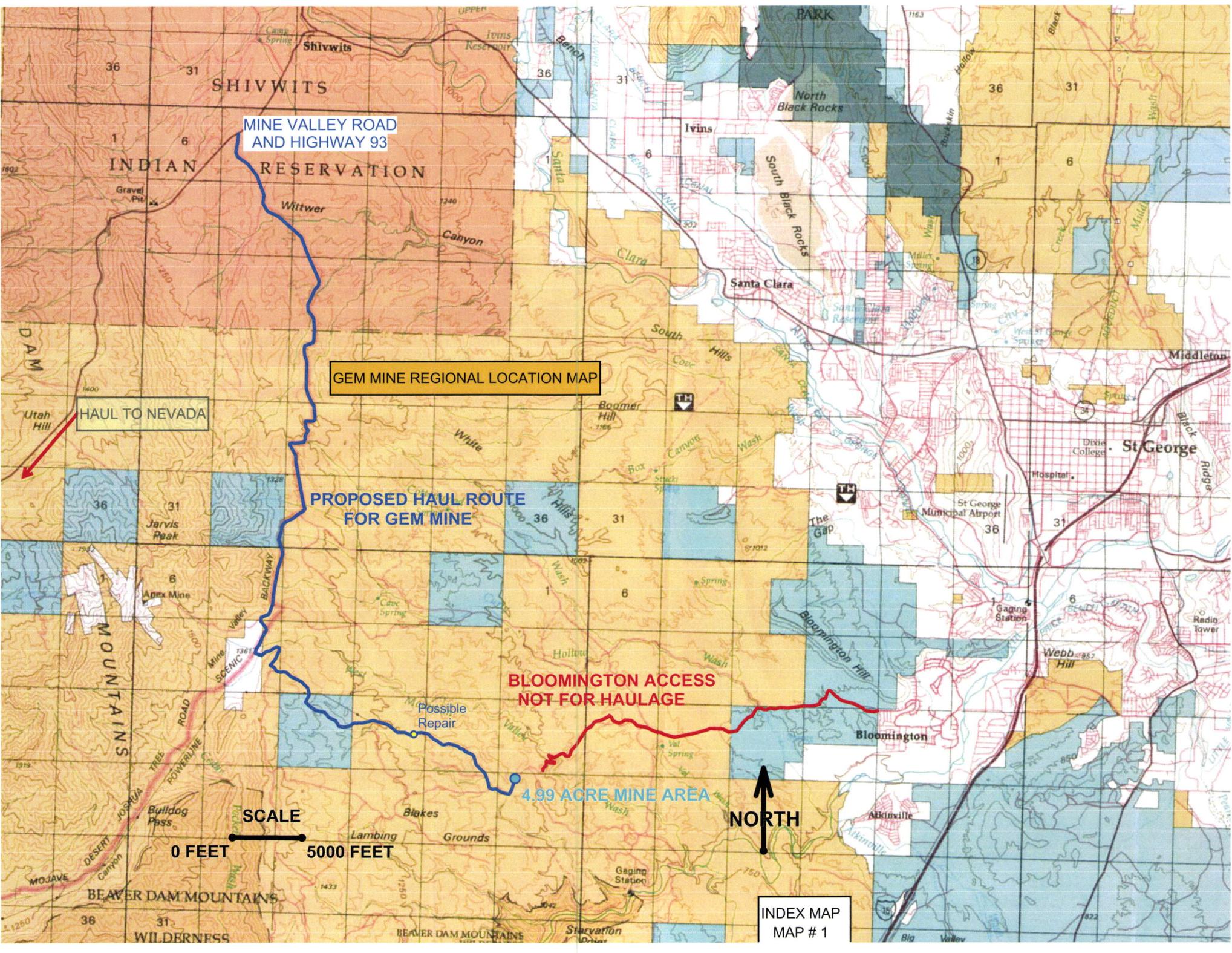
Map 5 - Location Map for RS 2477 RD270178

Map 6 - Location Map for RS 2477 RD270182

Map 7 - GEM MINE AREA PLANNING MAP (1:2,400 – 1Inch = 200 Feet)

Map 8 - 5 ACRE MINE AREA AERIAL PHOTO MAP

CROSS-SECTIONS A-A' THROUGH G-G'



MINE VALLEY ROAD AND HIGHWAY 93

GEM MINE REGIONAL LOCATION MAP

HAUL TO NEVADA

PROPOSED HAUL ROUTE FOR GEM MINE

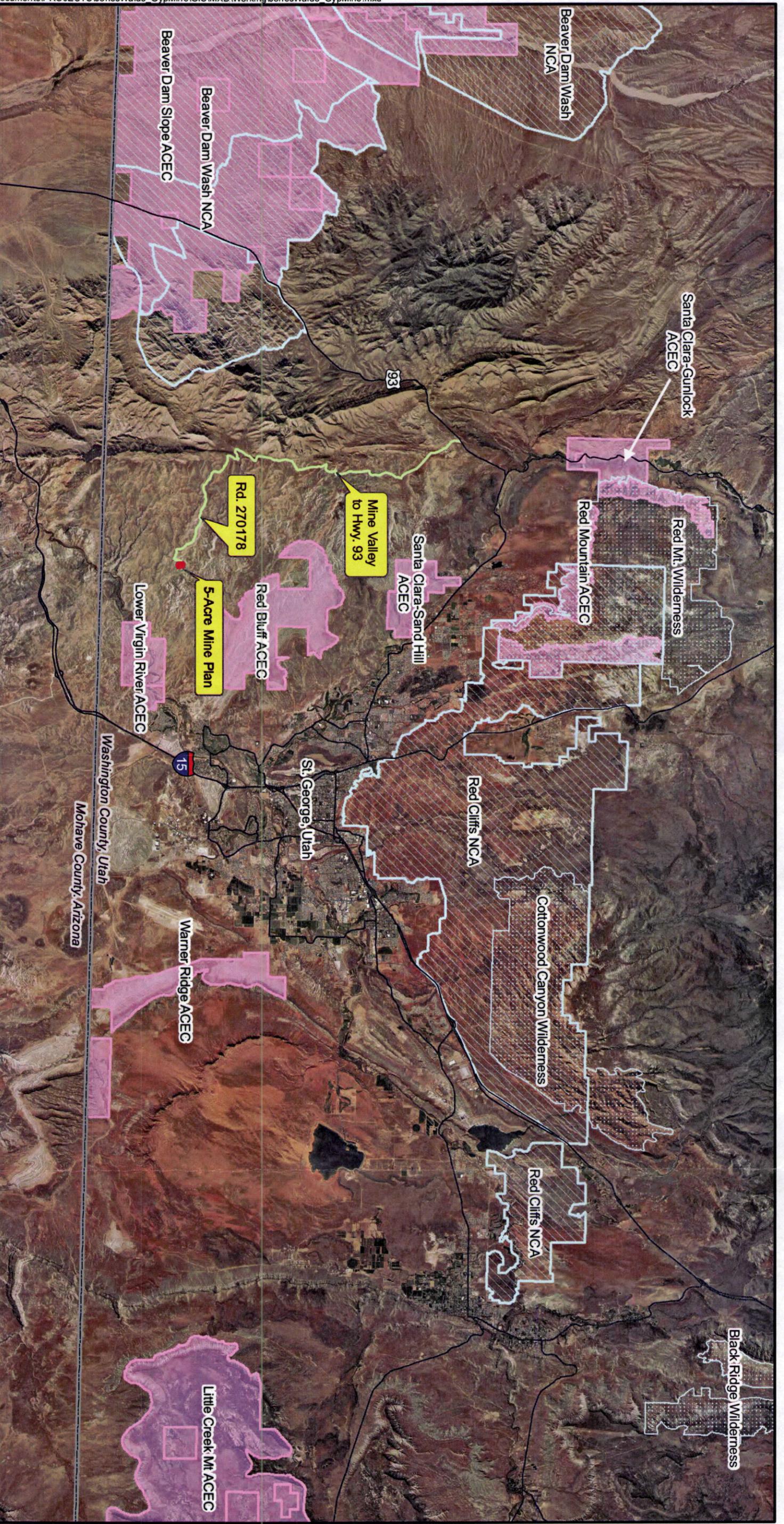
BLOOMINGTON ACCESS NOT FOR HAULAGE

4.99 ACRE MINE AREA

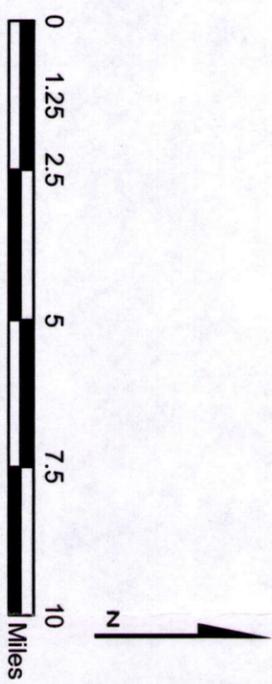
SCALE  
0 FEET 5000 FEET

NORTH

INDEX MAP  
MAP # 1



-  Wilderness Area
-  National Conservation Area
-  Area of Critical Environmental Concern



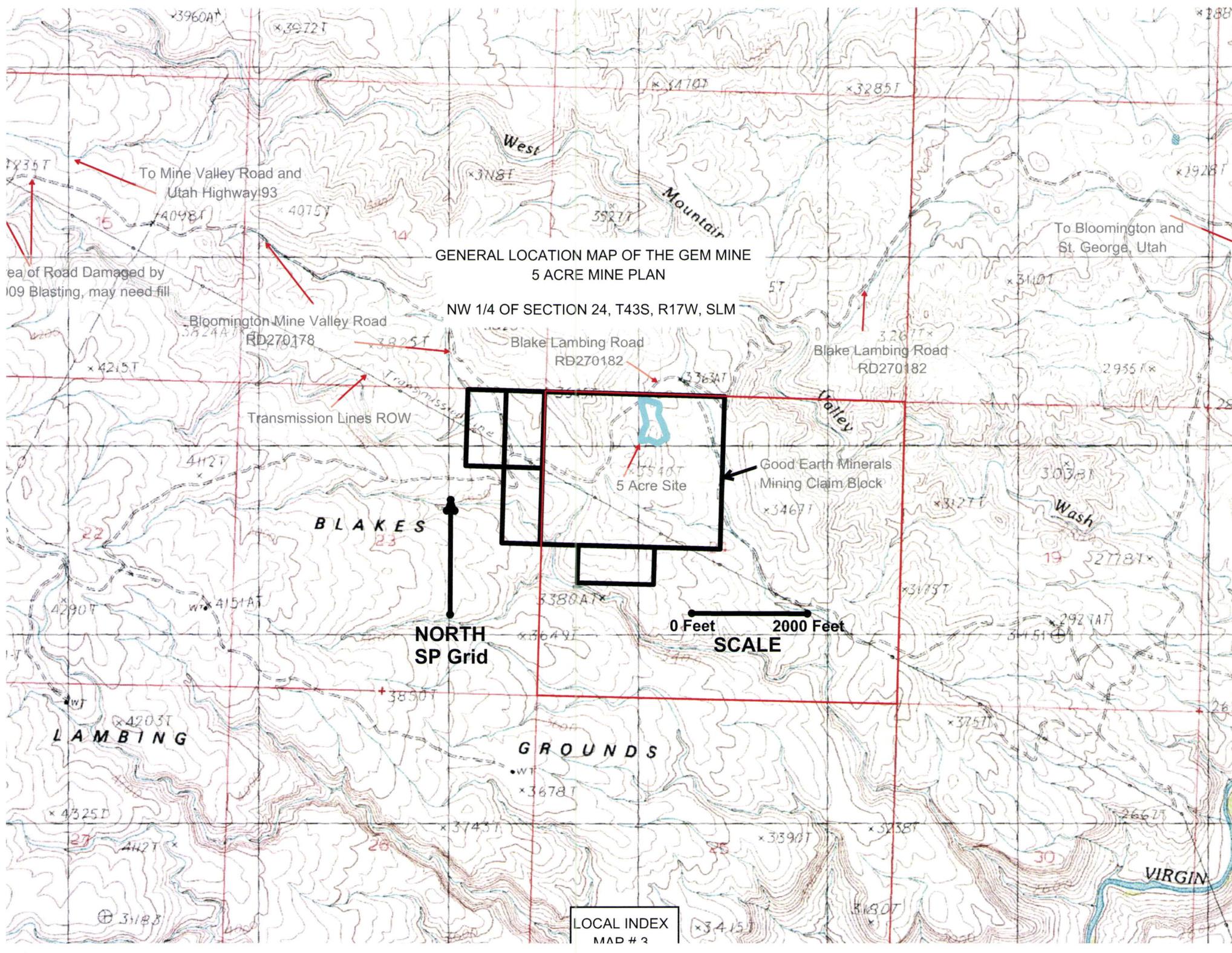
BASE MAP: NAIP IMAGRY

**Good Earth Minerals  
Beaver Dam Mountain Gypsum Mine**

Map 2: Haul Route, 5-Acre Mine Plan



DRAWN Seth Topham	DATE 01-22-10
1:150,000 1 in = 3 miles	



GENERAL LOCATION MAP OF THE GEM MINE  
5 ACRE MINE PLAN

NW 1/4 OF SECTION 24, T43S, R17W, SLM

To Mine Valley Road and  
Utah Highway 93  
Area of Road Damaged by  
109 Blasting, may need fill

To Bloomington and  
St. George, Utah

Area of Road Damaged by  
109 Blasting, may need fill

Bloomington Mine Valley Road  
RD270178

Blake Lambing Road  
RD270182

Blake Lambing Road  
RD270182

Transmission Lines ROW



5 Acre Site

Good Earth Minerals  
Mining Claim Block

BLAKES

LAMBING

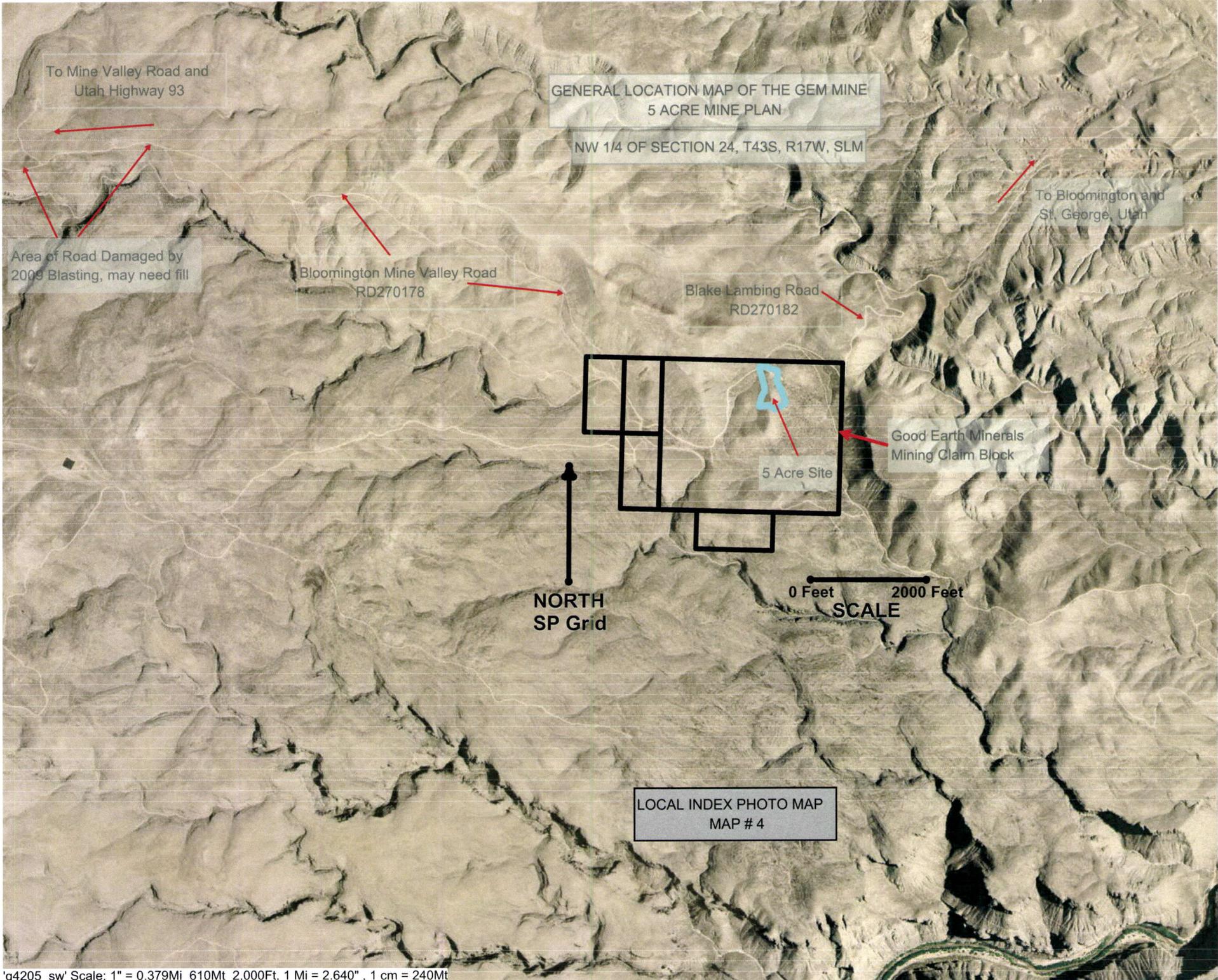
GROUNDS

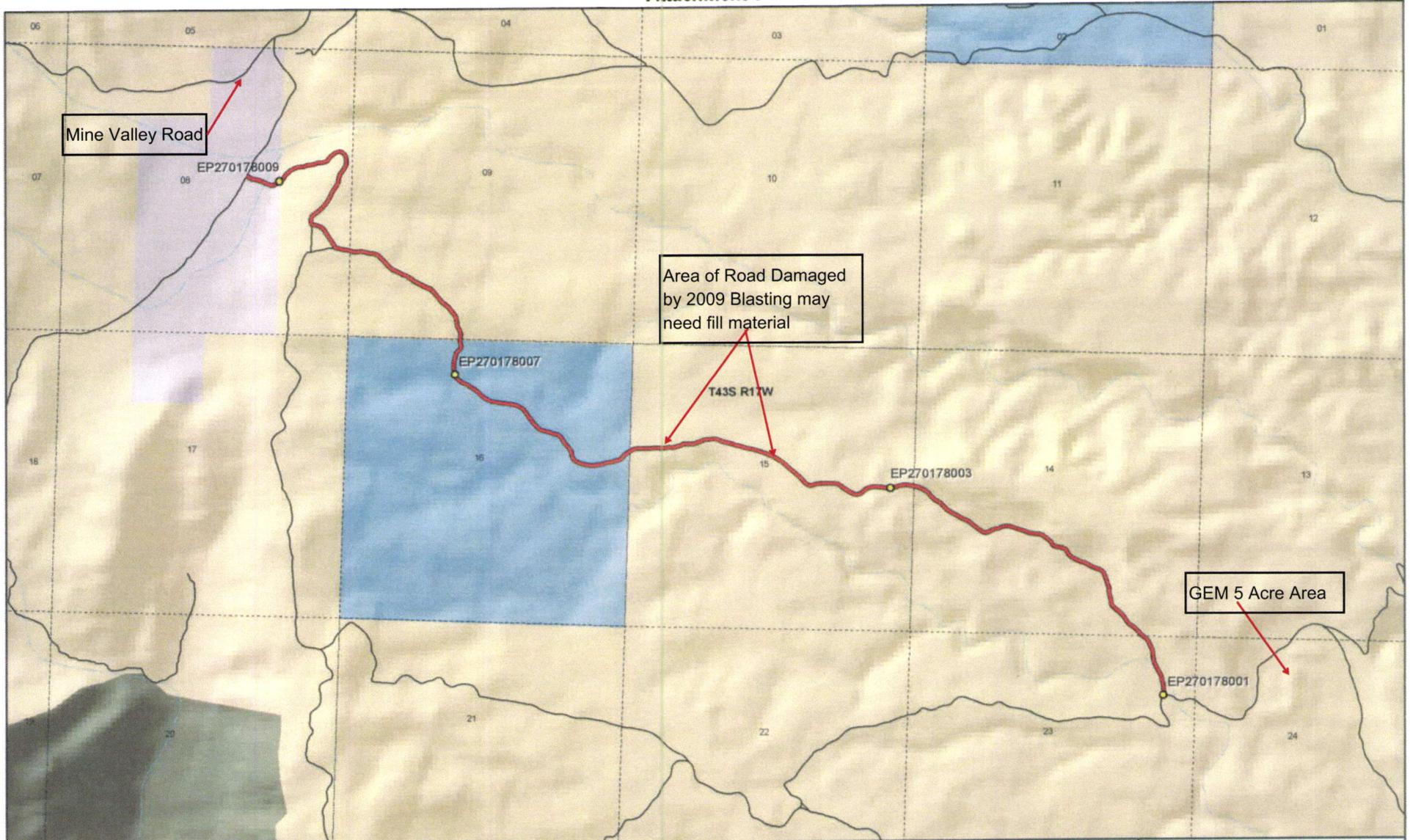
VIRGIN

0 Feet 2000 Feet  
SCALE

NORTH  
SP Grid

LOCAL INDEX  
MAP # 3





**BLOOMINGTON MINE VALLEY ROAD - Washington County**  
**SGID RD\_ID RD270178**

**Land Ownership Categories**

- |                            |                              |
|----------------------------|------------------------------|
| BLM                        | Wilderness                   |
| Private                    | UDWR Wildlife Reserve        |
| SITLA, State Trust Land    | DOD, Military                |
| USFS, National Forest      | State Sovereign Land         |
| State Parks and Recreation | National Recreation Area     |
| Tribal, Indian Reservation | USFWS, Natl. Wildlife Refuge |
| NPS, National Park         |                              |

**Transportation Network**

- |   |
|---|
| BLOOMINGTON MINE VALLEY ROAD                            |
| Other Roads   |
| Title V, Issued Or Under Consideration By BLM Or County |
| Photo Event Point                                       |
| Section = 1 Mile  |

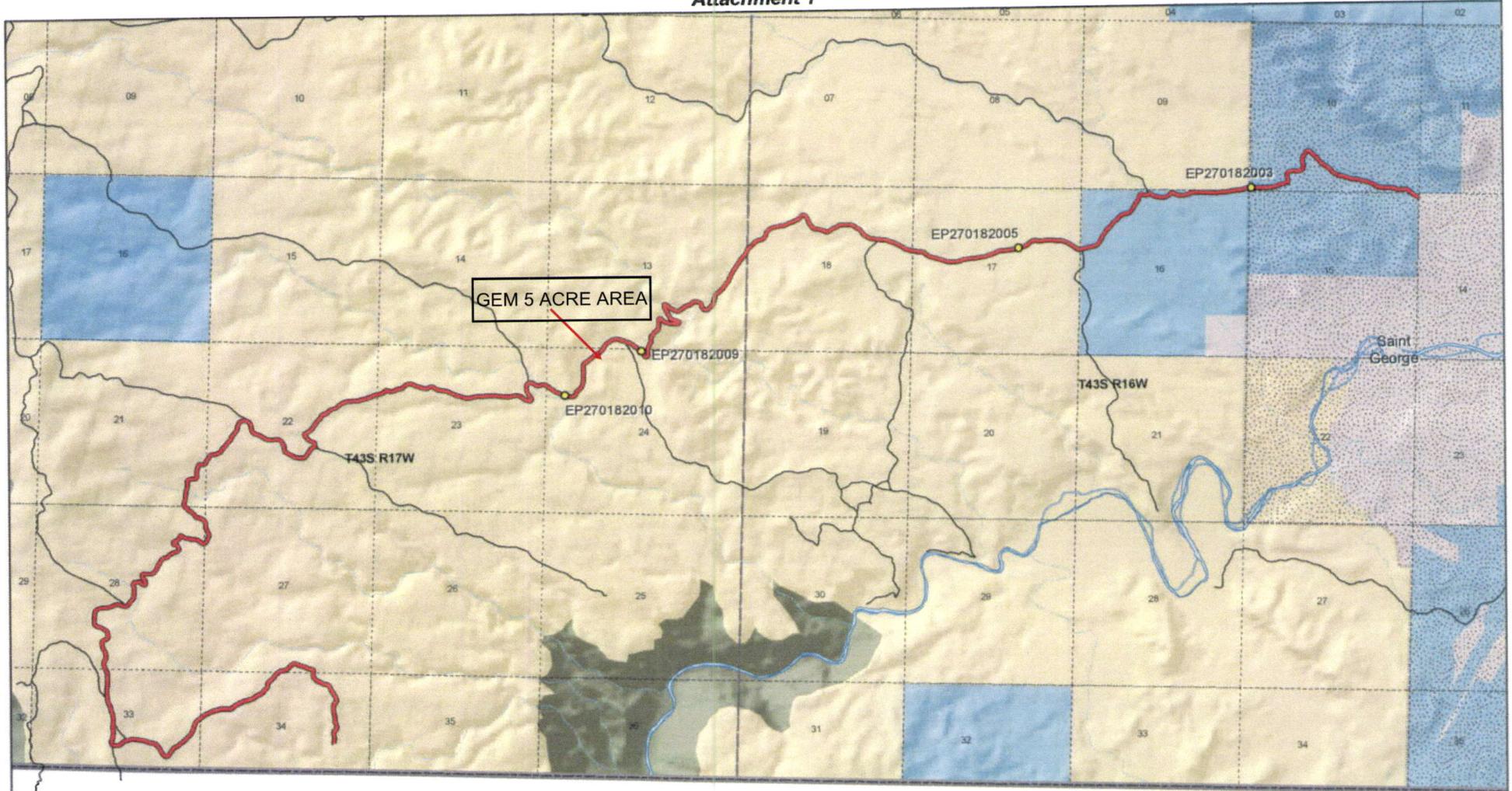


1:29,460  
1 inch equals 0.5 miles



Map prepared by the State of Utah  
 Automated Geographic Reference Center  
 Room 5130 State Office Building  
 Salt Lake City, Utah 84114  
 Feb 12, 2008





**BLAKE LAMBING ROAD - Washington County**  
**SGID RD\_ID RD270182**

**Land Ownership Categories**

- BLM
- Private
- SITLA, State Trust Land
- USFS, National Forest
- State Parks and Recreation
- Tribal, Indian Reservation
- NPS, National Park
- Wilderness
- UDWR Wildlife Reserve
- DOD, Military
- State Sovereign Land
- National Recreation Area
- USFWS, Natl. Wildlife Refuge

**Transportation Network**

- BLAKE LAMBING ROAD
- Other Roads
- Title V, Issued Or Under Consideration By BLM Or County
- Photo Event Point
- Section = 1 Mile

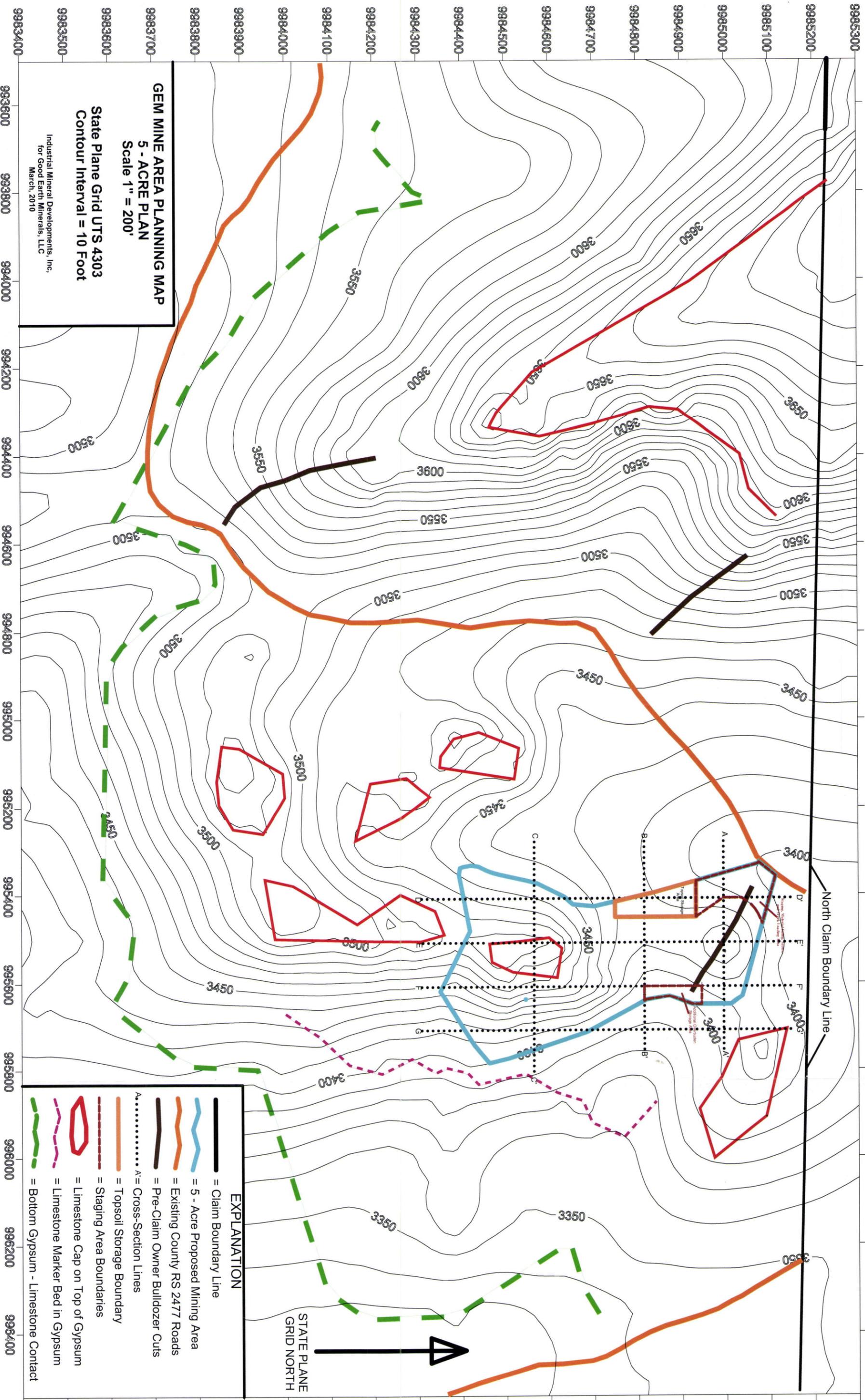


1:53,598  
1 inch equals 0.8 miles



Map prepared by the State of Utah  
 Automated Geographic Reference Center  
 Room 5130 State Office Building  
 Salt Lake City, Utah 84114  
 Feb 12, 2008

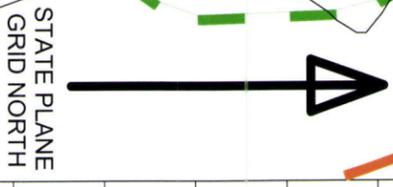




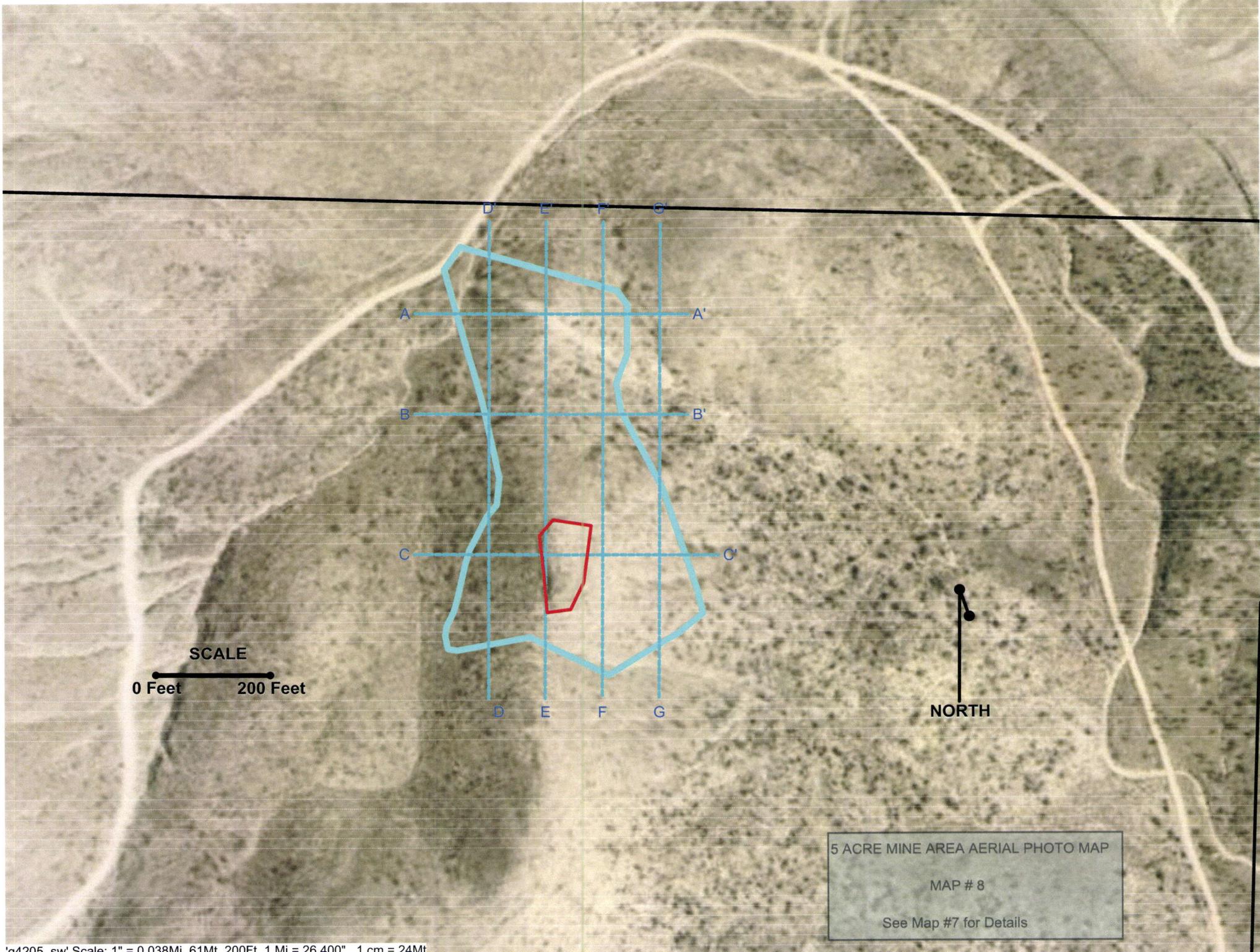
**GEM MINE AREA PLANNING MAP**  
**5 - ACRE PLAN**  
 Scale 1" = 200'  
 State Plane Grid UTS 4303  
 Contour Interval = 10 Foot

Industrial Mineral Developments, Inc.  
 for Good Earth Minerals, LLC  
 March, 2010

- EXPLANATION**
- = Claim Boundary Line
  - = 5 - Acre Proposed Mining Area
  - = Existing County RS 2477 Roads
  - = Pre-Claim Owner Bulldozer Cuts
  - ..... A = Cross-Section Lines
  - = Topsoil Storage Boundary
  - = Staging Area Boundaries
  - = Limestone Cap on Top of Gypsum
  - = Limestone Marker Bed in Gypsum
  - = Bottom Gypsum - Limestone Contact



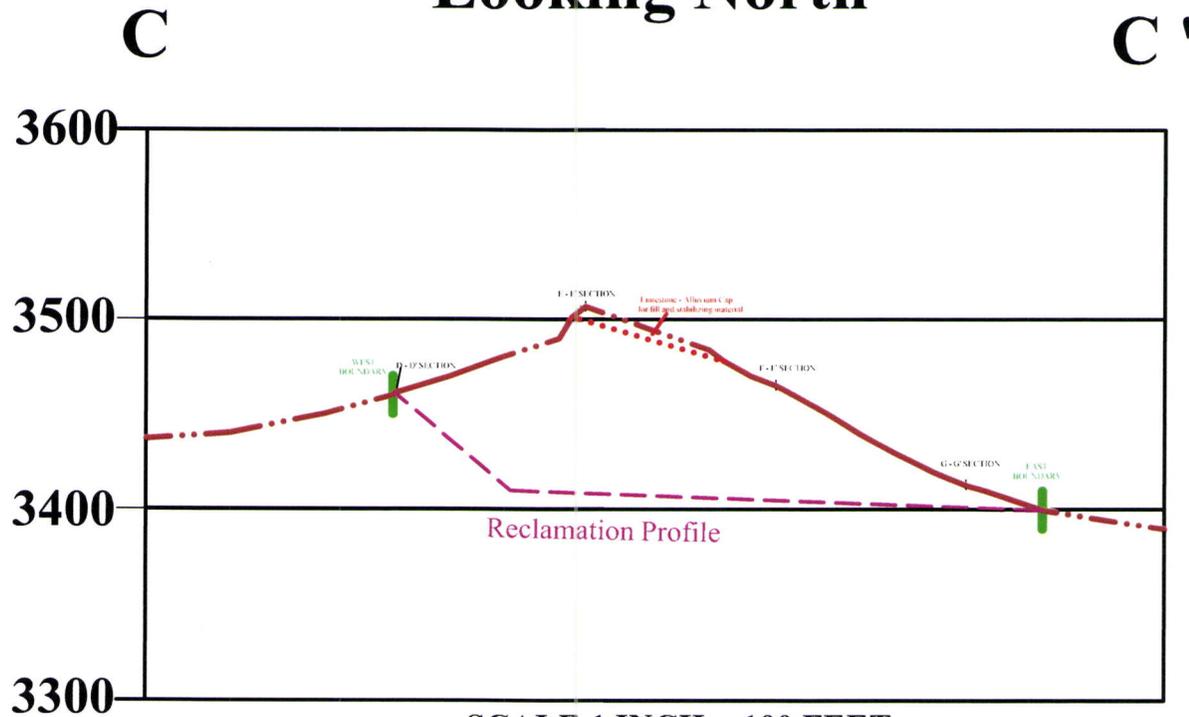
North Claim Boundary Line







# GEM MINE 5-ACRE PLAN MINING AND RECLAMATION CROSS - SECTION C - C' NW 1/4 SECTION 24, T43S, R17W, SLM Looking North



SCALE 1 INCH = 100 FEET

## EXPLANATION

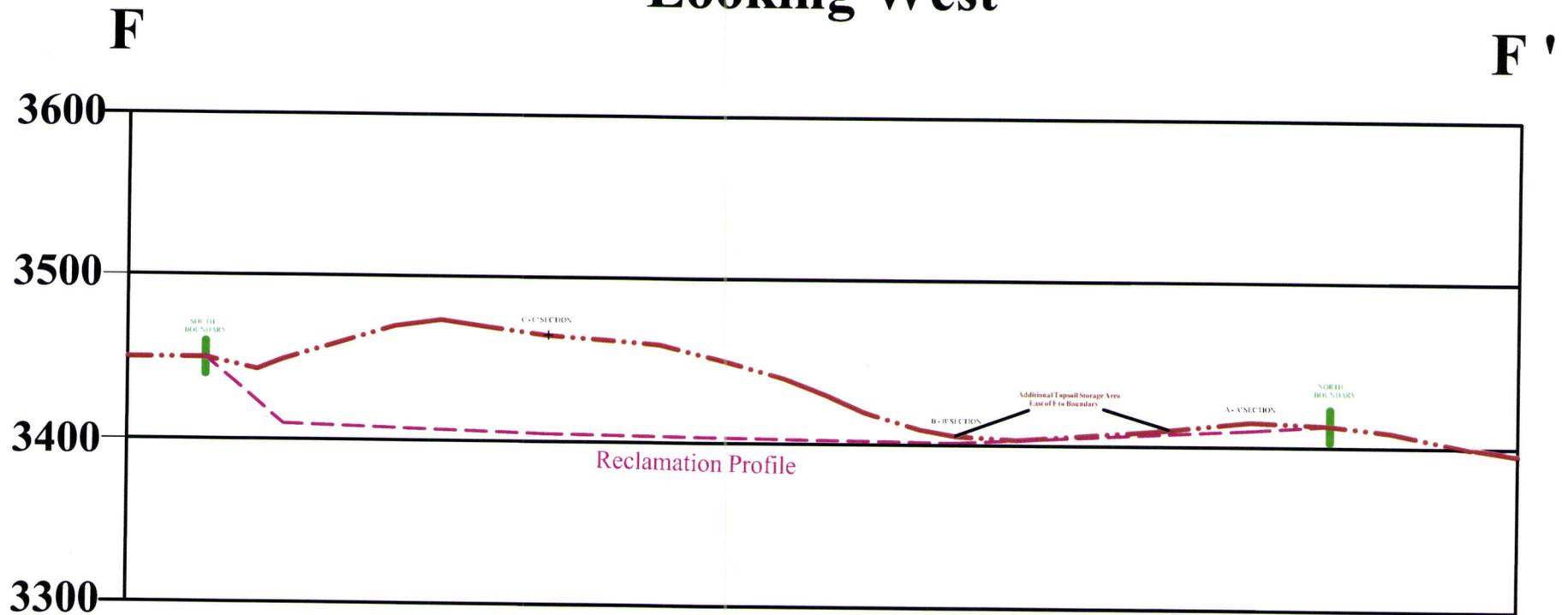
**Top of Surface** =

**End Reclamation Profile** =





# GEM MINE 5-ACRE PLAN MINING AND RECLAMATION CROSS - SECTION F- F' NW 1/4 SECTION 24, T43S, R17W, SLM Looking West



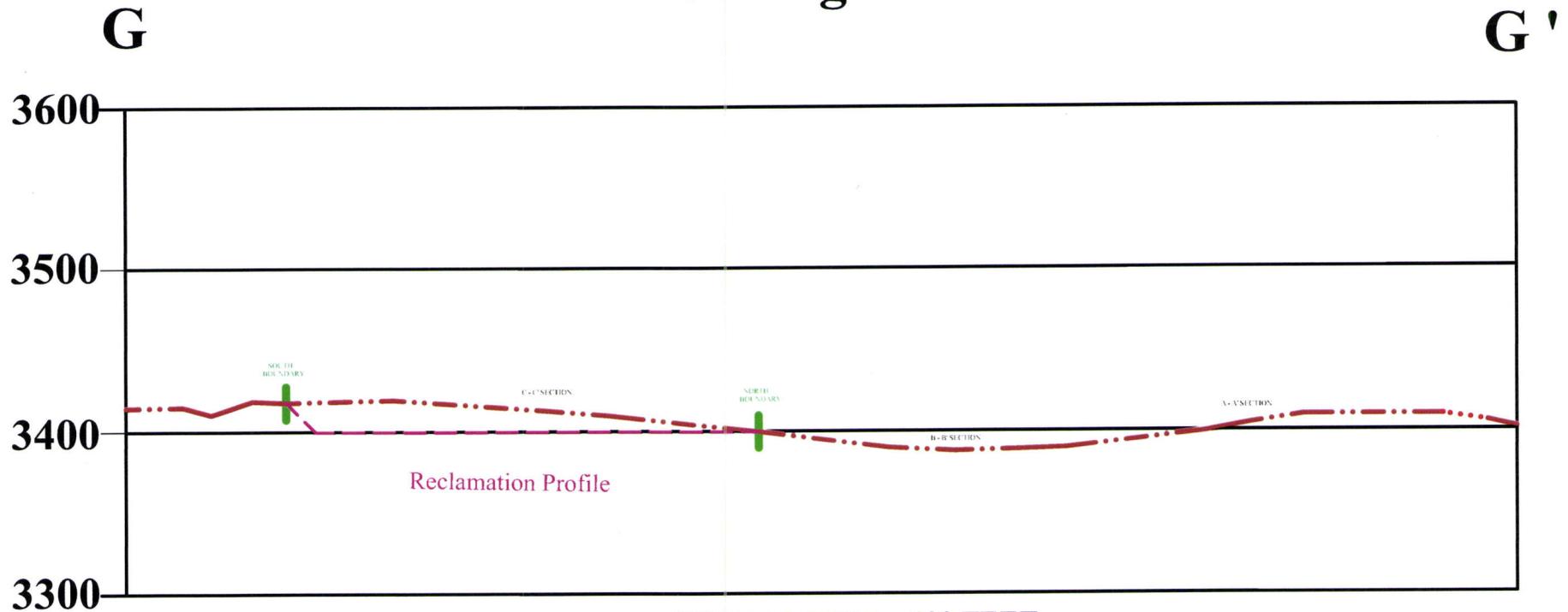
SCALE 1 INCH = 100 FEET

## EXPLANATION

**Top of Surface** =

**End Reclamation Profile** =

**GEM MINE 5-ACRE PLAN  
MINING AND RECLAMATION  
CROSS - SECTION G- G'  
NW 1/4 SECTION 24, T43S, R17W, SLM  
Looking West**



SCALE 1 INCH = 100 FEET

**EXPLANATION**

**Top of Surface** =

**End Reclamation Profile** =